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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,362	10/24/2003	Ashish Shah	14917.0552USI1	2600

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EXAMINER	
FEARER, MARK D	

ART UNIT	PAPER NUMBER
2143	

MAIL DATE	DELIVERY MODE
03/27/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/693,362	SHAH, ASHISH	
	Examiner	Art Unit	
	MARK D. FEARER	2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 October 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,6-15,17-23 and 25-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4, 6-15, 17-23, and 25-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *24 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *1/3/08 and 1/16/08*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

The information disclosure statements (IDS) submitted on 03 January 2008 and 16 January 2008 have been considered by the examiner.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3-4, 6, 9-10, 12, 14-15, 17, 20, 22-23 and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by Hurley et al. (US 6678882 B1).

Consider claims 1, 12 and 20. Hurley et al. discloses a method for synchronizing multiple instances of a storage platform for a hardware/software interface systems, said method comprising: dividing said storage platform into basic units of granularity (column 30 line 15 – column 31 line 47); sequentially enumerating changes and tracking said changes on a per change unit basis (column 4 line 45 – column 5 line 14 and column 5 line 56 – column 6 line 4); for each instance, tracking the state of changes for that instances, as well as the state of changes for a plurality of other known instances in the

sync community (column 15 lines 30-52); and for synchronization, identifying new changes by comparing the enumerated changes for a particular instance with the state of changes for that instance (column 4 line 45 – column 5 line 14); wherein said multiple instances of said storage platform comprise a multi-master sync community (column 25 line 63 – column 26 line 12).

Consider claims 3, 14 and 22, as applied to claims 1, 12 and 20, respectively. Hurley et al. discloses a method wherein a change unit is a Property (column 15 lines 30-44).

Consider claims 4, 15 and 23, as applied to claims 1, 12 and 20, respectively. Hurley et al. discloses a method wherein a change unit is an individual Property of an Item, Extension, or Relationship, but not a Property of a Nested Element in said Item, Extension, or Relationships (column 17 lines 11-19).

Consider claims 6, 17 and 25, as applied to claims 1, 12 and 20, respectively. Hurley et al. discloses a method wherein changes to a replica are uniquely enumerated based on a unique replica identification, and wherein said changes are sequentially enumerated for said replica (column 33 lines 25-46).

Consider claim 9, as applied to claim 1. Hurley et al. discloses a method wherein said instances maintain a synchronization mapping of their other known instances with which to synchronize in a sync community (column 34 lines 15-26).

Consider claim 10, as applied to claim 9. Hurley et al. discloses a method wherein an instance may have multiple mappings in order to enable different

synchronization behaviors with different other known instances in the same sync community (column 10 lines 21-32).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 2, 13 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hurley et al. (US 6678882 B1) in view of Kawamichi et al. (US 7181470 B1).

Consider claims 2, 13 and 21, as applied to claims 1, 12 and 20, respectively. Hurley et al. discloses a collaborative model for software systems with synchronization submodel with merge feature, automatic conflict resolution and isolation of potential changes for reuse comprising granular storage units. However, Hurley et al. fails to disclose a method wherein a change unit is an Item. Kawamichi et al. discloses a

coincidence method for distribution system wherein change requests comprise Item IDs (column 3 line 50 – column 4 line 8).

Therefore, it would have been obvious for a person of ordinary skill in the art at the time the invention was made to incorporate a coincidence method for distribution system wherein change requests comprise Item IDs as taught by Kawamichi et al. with a collaborative model for software systems with synchronization submodel with merge feature, automatic conflict resolution and isolation of potential changes for reuse comprising granular storage units as taught by Hurley et al. for the purpose of collaborative synchronization.

Claims 7-8, 18-19 and 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hurley et al. (US 6678882 B1) in view of Ooe et al. (US 5737743 A).

Consider claims 7, 18, and 26, as applied to claims 1, 12 and 20, respectively. Hurley et al. discloses a collaborative model for software systems with synchronization submodel with merge feature, automatic conflict resolution and isolation of potential changes for reuse comprising granular storage units. However, Hurley et al. fails to disclose a method wherein the changes are enumerated at a change unit level. Ooe et al. discloses a disk block controller and file system which supports large files by allocating multiple sequential physical blocks to logical blocks wherein if the number of free physical disk block spaces is insufficient during such an allocation, the change unit changes part of an area used for a large number of sequential empty physical disk block spaces into an area used for a small number of sequential empty physical disk block spaces (column 4 lines 8-19).

Therefore, it would have been obvious for a person of ordinary skill in the art at the time the invention was made to incorporate a disk block controller and file system which supports large files by allocating multiple sequential physical blocks to logical blocks wherein if the number of free physical disk block spaces is insufficient during such an allocation, the change unit changes part of an area used for a large number of sequential empty physical disk block spaces into an area used for a small number of sequential empty physical disk block spaces as taught by Ooe et al. with a collaborative model for software systems with synchronization submodel with merge feature, automatic conflict resolution and isolation of potential changes for reuse comprising granular storage units as taught by Hurley et al. for the purpose of collaborative synchronization.

Consider claims 8, 19 and 27, as applied to claims 1, 12 and 20, respectively. Hurley et al., as modified by Ooe et al., further discloses a method wherein conflicts are detected and resolved at a change unit level (Hurley et al., column 1 line 60 - column 2 line 5).

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hurley et al. (US 6678882 B1) in view of Noel et al. (US 6381682 B2).

Consider claim 11, as applied to claim 9. Hurley et al. discloses a collaborative model for software systems with synchronization submodel with merge feature, automatic conflict resolution and isolation of potential changes for reuse comprising granular storage units. However, Hurley et al. fails to disclose a method wherein mapping comprises, for at least one sync partner, a community identification and a

mapping identification for said sync partner, in order to synchronize with said sync partner without information pertaining to a location for said sync partner. Noel et al. discloses a method for dynamically sharing memory in a multiprocessor system wherein mapping comprises, for at least one sync partner, a community identification and a mapping identification for said sync partner, in order to synchronize with said sync partner without information pertaining to a location for said sync partner (column 10 lines 32-48 and column 29 line 58 – column 30 line 14).

Therefore, it would have been obvious for a person of ordinary skill in the art at the time the invention was made to incorporate a method for dynamically sharing memory in a multiprocessor system wherein mapping comprises, for at least one sync partner, a community identification and a mapping identification for said sync partner, in order to synchronize with said sync partner without information pertaining to a location for said sync partner as taught by Noel et al. with a collaborative model for software systems with synchronization submodel with merge feature, automatic conflict resolution and isolation of potential changes for reuse comprising granular storage units as taught by Hurley et al. for the purpose of collaborative synchronization.

Conclusion

Any response to this Office Action should be faxed to (571) 273-8300 or mailed to:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Mark Fearer whose telephone number is (571) 270-1770. The Examiner can normally be reached on Monday-Thursday from 7:30am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Nathan Flynn can be reached on (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 571-272-4100.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Mark Fearer
M.D.F./mdf
March 20, 2008

/Kenny S Lin/
Primary Examiner, Art Unit 2152